

SEQUENCE LISTING

<110> FARWICK, Mike

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BATHE, Brigitte

<120> NUCLEOTIDE SEQUENCES WHICH CODE FOR THE RODA PROTEIN

<130> 212532US0

<150> DE10044943.3

<151> 2000-09-12

<150> DE10132947.4

<151> 2001-07-06

<160> 4

<170> PatentIn version 3.1

<210> 1

<211> 1761

<212> DNA

<213> Corynebacterium glutamicum

<220>

<221> CDS

<222> (238) .. (1560)

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cgaggtccag gcgcaaattgc aacgggtggc tgctcaagct ttgccagtgt gcgtgaactt 180  
agaagtaaca accgggtggcg atagaaacga acccggagtc aattgtaggg aggtctc 237  
atg aac acg ctt gaa cga tta aag ctt cgt cgc acg gaa atg tgg ctg 285  
Met Asn Thr Leu Glu Arg Leu Lys Leu Arg Arg Thr Glu Met Trp Leu  
5 10 15  
ctg ata ctt gcc aca ctc gtt gtg tcg atc atg ttc atc agc ctc gag 333  
Leu Ile Leu Ala Thr Leu Val Val Ser Ile Met Phe Ile Ser Leu Glu  
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ctg gcc atg ggc aat gag ttg ggt acc cat att ttg atg ctg atg ggc 381  
Leu Ala Met Gly Asn Glu Leu Gly Thr His Ile Leu Met Leu Met Gly  
35 40 45  
aga tat atc ggt atc ttc atc gtc gcg cac cta gcc atg gca tgg gtg 429  
Gly Tyr Ile Gly Ile Phe Ile Val Ala His Leu Ala Met Ala Trp Val  
50 55 60  
gcg ccg ttt gct gat caa atc atg ctg cct gtg gtg gcg gtg ctc aat 477  
Ala Pro Phe Ala Asp Gln Ile Met Leu Pro Val Val Ala Val Leu Asn  
65 70 75 80  
ggc att ggt ttg gtg atg att tat cgc ctt gat gag gcc acg ggc tac 525  
Gly Ile Gly Leu Val Met Ile Tyr Arg Leu Asp Glu Ala Thr Gly Tyr  
85 90 95  
agc acg gtc aat agc caa ttg atg tgg acg gtt gtt ggc gtc acg ctg 573  
Ser Thr Val Asn Ser Gln Leu Met Trp Thr Val Val Gly Val Thr Leu  
100 105 110  
atg gtg gct gtg ttg ttg ctg ttg cgt gat tac aag tcg ctt tcg cgt 621  
Met Val Ala Val Leu Leu Leu Leu Arg Asp Tyr Lys Ser Leu Ser Arg  
115 120 125  
tat tcc tac ctc ctc ggt gtg gtg ggc atc gtg ctg ctg gcg ctg cct 669  
Tyr Ser Tyr Leu Leu Gly Val Val Gly Ile Val Leu Leu Ala Leu Pro  
130 135 140

ctc	gtg	tgg	ccg	cag	cca	ggc	ggc	gtg	gaa	gcc	cgc	atc	tgg	att	tgg	717
Leu	Val	Trp	Pro	Gln	Pro	Gly	Gly	Val	Glu	Ala	Arg	Ile	Trp	Ile	Trp	
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ctt	gga	cct	ttc	tcc	atc	cag	cca	ggc	gag	ttc	tcc	aag	att	ttg	ctg	765
Leu	Gly	Pro	Phe	Ser	Ile	Gln	Pro	Gly	Glu	Phe	Ser	Lys	Ile	Leu	Leu	
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ctg	ctg	ttc	ttt	gct	cag	ctg	cta	gcc	acc	aag	cgt	gct	ttg	ttt	act	813
Leu	Leu	Phe	Phe	Ala	Gln	Leu	Leu	Ala	Thr	Lys	Arg	Ala	Leu	Phe	Thr	
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gtt	gcg	ggc	tac	cgt	ttc	ctc	ggc	atg	gat	ttc	cct	cgt	ttg	cgt	gac	861
Val	Ala	Gly	Tyr	Arg	Phe	Leu	Gly	Met	Asp	Phe	Pro	Arg	Leu	Arg	Asp	
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ctc	gcg	ccg	att	ctt	gtg	gtg	tgg	gcg	ttg	gct	att	ttg	atc	atg	gct	909
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Lys	Ile	Gln	Glu	Arg	Val	Gln	Asn	Phe	Val	Asp	Pro	Val	Ala	His	Tyr	
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Asp	Thr	Thr	Gly	Tyr	Gln	Leu	Ser	Gln	Ser	Leu	Phe	Gly	Met	Ser	Trp	
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Gly	Gly	Ile	Thr	Gly	Thr	Gly	Ile	Gly	Gln	Gly	Tyr	Pro	Asn	Met	Ile	
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cct	gtc	gtg	cac	tcg	gac	ttc	att	ctc	gca	gcc	att	ggc	gag	gag	ctt	1245
Pro	Val	Val	His	Ser	Asp	Phe	Ile	Leu	Ala	Ala	Ile	Gly	Glu	Glu	Leu	
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ggc	ctg	att	ggc	ctg	gcg	gcc	atc	atc	gtg	ctg	ttt	ggc	gtg	ttt	gtc	1293
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acc cgc ggt atg cgc acc gct acc ctg gct cgt gac agc tac gga aag 1341  
 Thr Arg Gly Met Arg Thr Ala Thr Leu Ala Arg Asp Ser Tyr Gly Lys  
 355 360 365

ctc gtg gca tct ggt ctg tcg atg acc atc atg atc cag att ttc gtc 1389  
 Leu Val Ala Ser Gly Leu Ser Met Thr Ile Met Ile Gln Ile Phe Val  
 370 375 380

gtc gtg gca ggt att tct tca ctg atg ccc atg aca ggt ttg acc act 1437  
 Val Val Ala Gly Ile Ser Ser Leu Met Pro Met Thr Gly Leu Thr Thr  
 385 390 395 400

ccg ttt atg tcc cag ggt ggt tca tcc ctg atg gct aac tac att ctg 1485  
 Pro Phe Met Ser Gln Gly Gly Ser Ser Leu Met Ala Asn Tyr Ile Leu  
 405 410 415

atg gcc atc atc ttg cgt att tct gac agt gcc cgc cga cct gtc atg 1533  
 Met Ala Ile Ile Leu Arg Ile Ser Asp Ser Ala Arg Arg Pro Val Met  
 420 425 430

taa aag caa gca tcg gag gtg gct gcg tgaaccgctc gattcgaatc 1580  
 Ser Lys Gln Ala Ser Glu Val Ala Ala  
 435 440

acatccctct tctcttttgc tctgatcttg gtgctcgtag caaacctcac ctggattcag 1640

gcttttaggg acgatgatct tgctcagaac ccactgaacg cacgtgggtt cctggaggcg 1700

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<211> 441

<212> PRT

<213> Corynebacterium glutamicum

<400> 2

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Leu Ala Met Gly Asn Glu Leu Gly Thr His Ile Leu Met Leu Met Gly  
35 40 45

Gly Tyr Ile Gly Ile Phe Ile Val Ala His Leu Ala Met Ala Trp Val  
50 55 60

Ala Pro Phe Ala Asp Gln Ile Met Leu Pro Val Val Ala Val Leu Asn  
65 70 75 80

Gly Ile Gly Leu Val Met Ile Tyr Arg Leu Asp Glu Ala Thr Gly Tyr  
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Ser Thr Val Asn Ser Gln Leu Met Trp Thr Val Val Gly Val Thr Leu  
100 105 110

Met Val Ala Val Leu Leu Leu Leu Arg Asp Tyr Lys Ser Leu Ser Arg  
115 120 125

Tyr Ser Tyr Leu Leu Gly Val Val Gly Ile Val Leu Leu Ala Leu Pro  
130 135 140

Leu Val Trp Pro Gln Pro Gly Gly Val Glu Ala Arg Ile Trp Ile Trp  
145 150 155 160

Leu Gly Pro Phe Ser Ile Gln Pro Gly Glu Phe Ser Lys Ile Leu Leu  
165 170 175

Leu Leu Phe Phe Ala Gln Leu Leu Ala Thr Lys Arg Ala Leu Phe Thr  
180 185 190

Val Ala Gly Tyr Arg Phe Leu Gly Met Asp Phe Pro Arg Leu Arg Asp  
195 200 205

Leu Ala Pro Ile Leu Val Val Trp Ala Leu Ala Ile Leu Ile Met Ala  
210 215 220

Gly Ala Asn Asp Phe Gly Pro Ala Leu Leu Leu Phe Thr Thr Val Leu  
225 230 235 240

Ala Met Val Tyr Leu Ala Thr Gly Arg Gly Ser Trp Leu Leu Ile Gly  
 245 250 255  
 Ala Val Leu Val Ala Val Gly Ala Phe Ala Val Tyr Gln Val Ser Ser  
 260 265 270  
 Lys Ile Gln Glu Arg Val Gln Asn Phe Val Asp Pro Val Ala His Tyr  
 275 280 285  
 Asp Thr Thr Gly Tyr Gln Leu Ser Gln Ser Leu Phe Gly Met Ser Trp  
 290 295 300  
 Gly Gly Ile Thr Gly Thr Gly Ile Gly Gln Gly Tyr Pro Asn Met Ile  
 305 310 315 320  
 Pro Val Val His Ser Asp Phe Ile Leu Ala Ala Ile Gly Glu Glu Leu  
 325 330 335  
 Gly Leu Ile Gly Leu Ala Ala Ile Ile Val Leu Phe Gly Val Phe Val  
 340 345 350  
 Thr Arg Gly Met Arg Thr Ala Thr Leu Ala Arg Asp Ser Tyr Gly Lys  
 355 360 365  
 Leu Val Ala Ser Gly Leu Ser Met Thr Ile Met Ile Gln Ile Phe Val  
 370 375 380  
 Val Val Ala Gly Ile Ser Ser Leu Met Pro Met Thr Gly Leu Thr Thr  
 385 390 395 400  
 Pro Phe Met Ser Gln Gly Gly Ser Ser Leu Met Ala Asn Tyr Ile Leu  
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<213> Artificial Sequence

<223> synthetic DNA

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213> Artificial Sequence

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